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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,926	03/25/2004	Yu Jen Chen	24061.103 (TSMC2003-0449)	1917
42717 7590 03/09/2007 HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			EXAMINER SIEK, VUTHE	
			ART UNIT 2825	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/810,926	<b>Applicant(s)</b> CHEN ET AL.	
	<b>Examiner</b> Vuthe Siek	<b>Art Unit</b> 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is in response to application 10/810,926 and response filed on 1/11/2007. Claims 1-22 remain pending in the application, where claims 13-22 are elected with traverse.
2. Applicants elected claims 13-22 with traverse. The restriction dated 12/11/06 is made final. Group I: claims 1-12 related to a method describes in Fig. 6 and Group II: claims 13-22 related to a FAB describes in Fig. 3. Status of the claims needed to be corrected.
3. The affidavit filed on 09/22/06 under 37 CFR 1.131 is sufficient to overcome the USPGUB No. 2005/0125763.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 13-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Torres et al. "The Virtual Fab the Core of Future Technology Development", IEEE, 1999, pages 222-226.
6. As to claim 1, Torres et al. the Virtual Fab that is the core of future technology development. The virtual fab comprising a web tracking system for semiconductor manufacturing processing (see whole documents). The virtual fab allows design information (transistor data or other semiconductor device data to be processed and

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manufactured) to be shared and tracked by partners. A semiconductor manufacture produces a semiconductor device for customers. The partners described herein are interpreted as including a manufacturer, customers and other entities involved in the manufacturing process. The design information shared and tracked by partners must include changes in the design information (transistor data for their new films, processes and new materials) that impact the manufacture of a semiconductor device (transistors) from the customer. The design database is inherently within the art and used to store design related information and shared by different entities. This is due to the web tracking system. The web tracking system as taught by Torres would shorten the cycle time of bringing innovation between entities and enable suppliers to develop equipment/material for advanced processing in the shortened time possible.

7. As to claim 14, Torres et al. teach an innovation of web tracking system that can be used to interactively shared design information between entities. A manufacturer of semiconductor device produces a semiconductor product for customers. The web tracking system as taught by Torres et al. would allow a customer to access design information from the design database to design a semiconductor device because the web tracking system (Internet) is known to be used for quickly accessing information including design related information.

8. As to claim 15, Torres et al. teach an innovation of web tracking system that can be used to interactively tracked and shared design information between entities. The web tracking system must include a design coordination engine that is used to interactively tracked and shared semiconductor design related information. The web

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tracking system must include time stamps that record login and logout because this is part of normal process of Internet. Therefore the web tracking system would also allow record time stamps of customer who access the design database.

9. As to claim 16, Torres et al. teach an innovation of web tracking system operated through the World Wide Web (page 223). The Virtual Fab that includes a web tracking system closely links all entities together where resources (semiconductor design related information) can be shared and access by all entities as needed (page 223). For example, suppliers with new materials will be able to test them out on SEMATECH's latest process. When a transistor lot is ordered by a supplier, university or member company, SEMATECH will process the lot and sent it to other facilities (notifying other entities) to add process steps that are not available at SEMATECH. In this way, the web tracking system closely links all entities together by sending information/notifying/alerting through the World Wide Web. From these teachings, the limitation of design coordination engine including an alert module to alert the customer if a change in design information occurred during a predetermined time period is inherently included.

10. As to claim 17, Torres et al. teach a web tracking system operated through a World Wide Web and used in semiconductor manufacturing field, where resources can be shared and tracked by different entities (see whole document). As known to practitioners in the art the World Wide Web (Internet) includes time stamps used to record login and logout of users (customers). Therefore, the limitation of the design

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coordination engine that determines the latest time that the customer having accessed design information that has been changed is inherently included.

11. As to claim 18, Torres et al. teach an innovation of web tracking system operated through the World Wide Web (page 223). The Virtual Fab that includes a web tracking system closely links all entities together where resources (semiconductor design related information) can be shared and access by all entities as needed (see whole document). For example, suppliers with new materials will be able to test them out on SEMATECH's latest process. When a transistor lot is ordered by a supplier, university or member company, SEMATECH will process the lot and sent it to other facilities (notifying other entities) to add process steps that are not available at SEMATECH (page 222). In this way, the web tracking system closely links all entities together by sending information/notifying/alerting through the World Wide Web. From these teachings, the limitation of alert module for verifying that the customer has not been alerted of the same design information change before is inherently included.

12. As to claim 19, Torres et al. teach an innovation of web tracking system operated through the World Wide Web (page 223). The Virtual Fab that includes a web tracking system closely links all entities together where resources (semiconductor design related information) can be shared and access by all entities as needed (see whole document). The paper as taught by Torres et al. will highlight how the virtual fab can reduce the cost, time and risk of research and development and assist universities in transforming their ideas into manufacturable solution. Suppliers with new materials will be able to test them out on SEMATECH's latest process. When a transistor lot is ordered by a

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supplier, university or member company, SEMATECH will process the lot and sent it to other facilities (notifying other entities) to add process steps that are not available at SEMATECH. In this way, the web tracking system closely links all entities together by sending information/notifying/alerting through the World Wide Web. From these teachings, the web tracking system operated through a World Wide Web as taught by Torres et al. must include a design coordination engine including an appraisal module in order to evaluate costs related to manufacturing of semiconductor device.

13. As to claims 20-22, Torres et al. teach a web tracking system operated through a World Wide Web, where resources (design information) related to semiconductor manufacturing can be shared/tracked/notified by and to entities (whole document). The design database is used to stored related design information of semiconductor device. Since the sub-databases are known to practitioners and they can be created as needed, the limitation of design database that includes an associated building block sub-database for technology and a customer design profile is inherently included because they can be created for storing related design information, technology and customer profile as needed.

### ***Remarks***

14. Applicants remarks have reviewed and not persuasive. Regarding to restriction claims 1-12 related to a method claim of the invention of Group I describe in Fig. 6 and claims 13-22 related to a virtual fab of the invention of Group II describe in Fig. 3. The restriction is made final. Applicants are requested to cancel the non-elected claims 1-12

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in next communications. The claims as recited are explicitly and inherently taught by Torres et al. as described in above rejection.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vuthe Siek whose telephone number is (571) 272-1906.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vuthe Siek

  
VUTHE SIEK  
PRIMARY EXAMINER